



IN THE UNITED STATES PATENT AND TRADEMARK OFFICE  
(Attorney Docket No. 111453.122US2)

In re Application of: Schermer et al. ) Examiner: Not Yet Assigned  
Serial No: 10/715,653 ) Art Unit: 1743  
Filed: November 18, 2003 )

For: METHOD AND APPARATUS FOR PRODUCING COMPACT MICROARRAYS

\*\*\*\*\*

**CERTIFICATE OF FIRST CLASS MAILING UNDER 37 CFR §1.8**

I hereby certify that this correspondence is being deposited with the United States Postal Service as First Class Mail addressed to: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450 on the date below.

Date: 2/24/04

Sarah Farris  
Sarah Farris

\*\*\*\*\*

Commissioner for Patents  
P.O. Box 1450  
Alexandria, VA 22313-1450

**TRANSMITTAL LETTER**

Dear Sir:

Enclosed for filing in the above-identified patent application are the following documents:

1. Information Disclosure Statement (2 pages);
2. Forms PTO-1449 Copied From Parent Application (09/527,893);
3. Form PTO-892 Copied From Parent Application (09/527,893);
4. Certificate of First Class Mailing; and
5. Return Postcard.

No fees are believed to be due in connection with this submission. However, please charge any fees that might be due or credit any overpayment to our Deposit Account No. 08-0219.

If there are any questions, please call the undersigned at the number below.

Respectfully submitted,

Date: 2-24-04  
HALE AND DORR LLP  
60 State Street  
Boston, MA 02109  
(617) 526-6564  
(617) 526-5000 (Facsimile)

Rajesh Vallabh  
Rajesh Vallabh, Reg. No. 35,761



IN THE UNITED STATES PATENT AND TRADEMARK OFFICE  
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*Sarah Farris*  
Sarah Farris

\*\*\*\*\*

Commissioner for Patents  
P.O. Box 1450  
Alexandria, VA 22313-1450

**INFORMATION DISCLOSURE STATEMENT**

Dear Sir:

Pursuant to 37 C.F.R., Applicants submit herewith the attached Forms PTO-1449 and Form PTO-892 for filing in the above-referenced application. The present application is a continuation of U.S. Patent Application No. 09/527,893. The Form PTO-1449 and the Form PTO-892 list references that were already submitted by the Applicants and cited by the Examiner in the parent application. Therefore, pursuant to 37 C.F.R. § 1.98 (d), no copies of the previously cited art are enclosed. This Information Disclosure Statement is being filed under 37 C.F.R. § 1.97 (b) before the mailing date of the first Office Action, therefore no fee is believed to be due.

This submission does not represent that a search has been made and does not constitute an admission that the listed documents are material to the patentability of the invention, or that the listed documents are prior art. Applicants reserve the right to take appropriate action to establish the patentability of the disclosed invention over the listed documents, should one or more of the documents be applied against the claims of the present application. If it should be determined that any of the listed documents constitute prior art under United States law, Applicants reserve the right to present to the Office relevant facts and law regarding the significance of such documents to the patentability of the claimed invention.

It is respectfully requested that the Examiner initial and return copies of the enclosed form PTO-1449 with the next Patent Office communication.

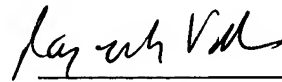
U.S. Patent Application No. 10/715,653  
Information Disclosure Statement  
Page Two

Please also charge any fees that might be due in connection with this matter to Deposit Account No. 08-0219. If there are any questions, please call the undersigned at the telephone number indicated below.

Respectfully submitted,

Date: 2-24-04

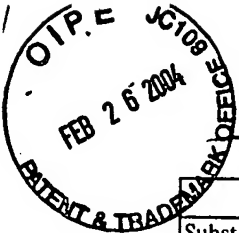
HALE AND DORR LLP  
60 State Street  
Boston, MA 02109  
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(617) 526-5000 (Facsimile)



Rajesh Vallabh, Reg. No. 35,761



Subst. Form PTO-1449		Docket Number (Optional) <b>109629-112 GSI-002 US</b>	Sheet <b>1</b> of <b>2</b>				
<b>INFORMATION DISCLOSURE STATEMENT BY APPLICANT</b>  (Use several sheets if necessary)		Application Number <b>09/527,893</b>					
		Applicant <b>Mack J. Schermer et al.</b>					
		Filing Date <b>March 20, 2000</b>	Group Art Unit <b>1743</b>				
<b>U. S. PATENT DOCUMENTS</b>							
EXAMINER INITIAL	CITE NO.	DOCUMENT NUMBER	DATE	NAME	CLASS	SUBCLASS	FILING DATE IF APPROPRIATE
	A	6,017,496	01/25/2000	Nova et al.			
	B	5,055,263	10/08/1991	Meltzer			
	C	5,922,617	07/13/1999	Wang et al.			
	D	5,700,637	12/23/1997	Southern			
	E	5,807,522	09/15/1998	Brown et al.			
	F	5,847,105	12/08/1998	Baldeschwieler et al.			
	G	6,015,880	01/18/2000	Baldeschwieler et al.			
	H	5,927,547	07/27/1999	Papen et al.			
	I	5,895,915	04/20/1999	DeWeerd et al.			
	J	5,770,151	06/23/1998	Roach et al.			
	Not Enclosed	09/259,065		Zeleny et al.			02/26/1999
<b>FOREIGN PATENT DOCUMENTS</b>							
EXAMINER INITIAL	CITE NO.	DOCUMENT NUMBER	DATE	COUNTRY	CLASS	SUBCLASS	Translation YES NO
	AA	WO 99/34931	07/15/1999	Tisone et al.			X
	BB	WO 99/42804	08/26/1999	Lemmo et al.			X
	CC	WO 99/36760	07/22/1999	Overbeck et al.			X
	DD	WO 00/01798	01/13/2000	Rose et al			X
<b>OTHER DOCUMENTS (Including Author, Title, Date, Pertinent Pages, Etc.)</b>							
EXAMINER INITIAL	CITE NO.						
	AAA	ALEXANDER KUKLIN, Ph.D., "Automation in Microarray Image Processing And Data Mining, High Throughput Screening" (Supplement to Biomedical Products), January 2000, pp. 4, 5, 6, 8, Cahners Publishing, Morris Plains, New Jersey, U.S.A.					
	BBB	Mark Schena, "DNA Microarrays: A Practical Approach", Chapters 2 and 6 (pp. 17-42 and pp. 101-120), New York, Oxford University Press, 1999, ISBN 0-19-963776-8					
	CCC	GSI Lumonics ScanArray Technical Note 300: "ScanArray Microarray Barcodes: Automated Microarray Analysis & Data Tracking, June, 1999					
	DDD	Website ( <a href="http://www.biorobotics.co.uk">www.biorobotics.co.uk</a> ) literature of BioRobotics, Inc. showing specifications of MicroGrid printed January 14, 2000					
	EEE	Website ( <a href="http://www.cartesiantech.com">www.cartesiantech.com</a> ) literature of Cartesian Technologies showing specifications of PinArray, nQUAD, CloneTracker and PegaSys printed January 14, 2000					
		<b>SEE CONTINUATION SHEET</b>					
EXAMINER				DATE CONSIDERED			
EXAMINER: Initial if citation considered, whether or not citation is in conformance with MPEP § 609; Draw line through citation if not in conformance and not considered. Include copy with next communication to applicant.							



Subst. Form PTO-1449		Docket Number (Optional) <b>109629-112 GSI-002 US</b>		Sheet <b>2</b> of <b>2</b>
<b>INFORMATION DISCLOSURE STATEMENT BY APPLICANT</b>  (Use several sheets if necessary)		Application Number <b>09/527,893</b>		
		Applicant <b>Mack J. Schermer et al.</b>		
		Filing Date <b>March 20, 2000</b>		
		Group Art Unit <b>1748</b>		
<b>U. S. PATENT DOCUMENTS</b>				
EXAMINER INITIAL	DOCUMENT NUMBER	DATE	NAME	FILING DATE IF APPROPRIATE
<b>FOREIGN PATENT DOCUMENTS</b>				
	DOCUMENT NUMBER	DATE	COUNTRY	CLASS SUBCLASS
<b>OTHER DOCUMENTS (Including Author, Title, Date, Pertinent Pages, Etc.)</b>				
EXAMINER INITIAL	CITE NO.			
	FFF	Website ( <a href="http://www.genemachines.com">www.genemachines.com</a> ) literature of GeneMachines showing specifications of OmniGrid printed January 14, 2000		
	GGG	Website ( <a href="http://www.geneticmicro.com">www.geneticmicro.com</a> ) literature of Genetic MicroSystems, Inc. showing specifications of GMS Microarray Analysis System printed on January 14, 2000		
	HHH	Website ( <a href="http://www.genetix.co.uk">www.genetix.co.uk</a> ) literature of Genetix Limited showing specifications of Q Array MicroArrayer printed January 14, 2000		
	III	Website ( <a href="http://www.genpakdna.com">www.genpakdna.com</a> ) literature of GenPak, Inc. showing specifications of genpak Array 21 Robotic Micro-Arrayer System printed on January 14, 2000		
	JJJ	Website ( <a href="http://www.genomicsolutions.com">www.genomicsolutions.com</a> ) literature of Genomic Solutions, Inc. showing specifications of Flexys printed on January 14, 2000		
	KKK	Website ( <a href="http://www.esit.com">www.esit.com</a> ) literature of Engineering Services Inc. showing specifications of SDDC printed on January 14, 2000		
	LLL	Website ( <a href="http://www.packardinst.com">www.packardinst.com</a> ) literature of Packard Instrument Company showing specifications of The BioChip Arrayer printed on January 17, 2000		
	MMM	Website ( <a href="http://www.arrayit.com">www.arrayit.com</a> ) literature of TeleChem International, Inc. showing specifications of ArrayIt printed on January 14, 2000		
	NNN	Website ( <a href="http://www.majerprecision.com">www.majerprecision.com</a> ) literature of Majer Precision Engineering showing specifications of MicroQuill printed on January 14, 2000		
	OOO	Website ( <a href="http://www.corning.com">www.corning.com</a> ) literature of Corning Incorporated showing specifications of Corning Microarray Technology (CMT) printed on January 27, 2000		
	PPP	Website ( <a href="http://nunc.nalgenunc.com">http://nunc.nalgenunc.com</a> ) literature of Nalge Nunc International showing specifications of MicroWell Plates printed January 27, 2000		
	QQQ	Website ( <a href="http://www.keyence.com">www.keyence.com</a> ) literature of Keyence Corporation of America showing specifications of CCD Bar Code Readers		
	RRR	Genetic MicroSystems Product Literature of GMS Microarray Analysis System		
EXAMINER		DATE CONSIDERED		
EXAMINER: Initial if citation considered, whether or not citation is in conformance with MPEP § 609; Draw line through citation if not in conformance and not considered. Include copy with next communication to applicant.				

Subst. Form PTO-1449  <div style="text-align: center;"> <b>SUPPLEMENTAL INFORMATION DISCLOSURE STATEMENT BY APPLICANT</b>  <i>(Use several sheets if necessary)</i> </div>		<table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 50%;">Docket Number (Optional)</td> <td style="width: 50%;">Application Number</td> </tr> <tr> <td>109629-112 GSI-002 US</td> <td>09/527,893</td> </tr> <tr> <td colspan="2">Applicant</td> </tr> <tr> <td colspan="2">Mack J. Schermer et al.</td> </tr> <tr> <td>Filing Date</td> <td>Group Art Unit</td> </tr> <tr> <td>March 20, 2000</td> <td>1743</td> </tr> </table>		Docket Number (Optional)	Application Number	109629-112 GSI-002 US	09/527,893	Applicant		Mack J. Schermer et al.		Filing Date	Group Art Unit	March 20, 2000	1743
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Applicant															
Mack J. Schermer et al.															
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March 20, 2000	1743														

U. S. PATENT DOCUMENTS							
EXAMINER INITIAL	CITE NO.	DOCUMENT NUMBER	DATE	NAME	CLASS	SUBCLASS	FILING DATE IF APPROPRIATE

FOREIGN PATENT DOCUMENTS								
EXAMINER INITIAL	CITE NO.	DOCUMENT NUMBER	DATE	COUNTRY	CLASS	SUBCLASS	Translation	
							YES	NO

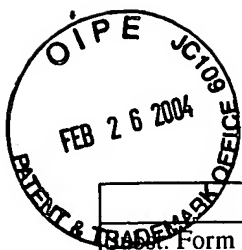
  

OTHER DOCUMENTS <i>(Including Author, Title, Date, Pertinent Pages, Etc.)</i>		
EXAMINER INITIAL	CITE NO.	
	SSS	Website ( <a href="http://www.intelligentbio.com">www.intelligentbio.com</a> ) literature of Intelligent Bio-Instruments showing specifications of HT Production Microarrayer printed on April 14, 2000
	TTT	Website ( <a href="http://www.labman.co.uk">www.labman.co.uk</a> ) literature of Labman Automation Limited showing specifications of Microarray Spotter systems printed on April 14, 2000

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					Docket Number (Optional)		Application Number	
					109629-112 GSI-002 US		09/527,893	
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					Filing Date	Group Art Unit		
					March 20, 2000	1743		
<b>U. S. PATENT DOCUMENTS</b>								
EXAMINER INITIAL	CITE NO.	DOCUMENT NUMBER	DATE	NAME	CLASS	SUBCLASS	FILING DATE IF APPROPRIATE	
	K	4,817,443	04/04/1989	Champseix et al.				
	L	5,408,891	04/25/1995	Barber et al.				
	M	5,525,515	06/11/1996	Blattner				
	N	5,603,342	02/18/1997	Shambaugh				
	O	5,827,744	10/27/1998	Fose et al.				
	P	5,897,837	04/27/1999	Mizuno				
	Q	5,935,859	08/10/1999	Elliott et al.				
	R	5,133,373	07/28/1992	Hoffman et al.				
	S	5,474,744	12/12/1995	Lerch				
<b>FOREIGN PATENT DOCUMENTS</b>								
EXAMINER INITIAL	CITE NO.	DOCUMENT NUMBER	DATE	COUNTRY	CLASS	SUBCLASS	Translation	
							YES	NO
<b>OTHER DOCUMENTS</b> <i>(Including Author, Title, Date, Pertinent Pages, Etc.)</i>								
EXAMINER INITIAL	CITE NO.							
	UUU	Mark Schena (editor), "Microarray Biochip Technology", Chapter 2, pp 19-38 (relevant pages 33-36 entitled <i>Pin Washing and Sample Carryover</i> ), Eaton Publishing, BioTechniques Books Division, Natick, Massachusetts U.S.A.						
EXAMINER					DATE CONSIDERED			
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Subt. For, PTO-1449

INFORMATION DISCLOSURE  
IN AN APPLICATION

(Use several sheets if necessary)

Docket Number  
111453.122Application Number  
09/527,893Applicant  
Schmer et al.Filing Date  
March 20, 2000Group Art Unit  
1743

Sheet 1 OF 1

## U.S. Patent Documents

EXAMINER INITIAL	DOCUMENT NUMBER	DATE	NAME	CLASS	SUBCLASS	FILING DATE IF APPROPRIATE
	6,024,925	Feb. 15, 2000	Little et al.	422	100	Jan. 23, 1997

COPY

## Foreign Patent Documents

EXAMINER INITIAL	DOCUMENT NUMBER	DATE	COUNTRY	CLASS	SUBCLASS	TRANSLATION	
						YES	NO
	WO 00/01798	Jan. 13, 2000	WO				
	WO 00/13796	Mar. 16, 2000	WO				
	GB 2 310 006 A	Aug. 13, 1997	Great Britain				

## Other Documents (Including Author, Title, Date Pertinent Pages, Etc.)

	VVV	Schummer et al., "Inexpensive Handheld Device for the Construction of High-Density Nucleic Acid Arrays," BioTechniques, Vol. 23, No. 6, 1997, pp 1087-1090

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Sheet

1

OF

1

## U.S. Patent Documents

EXAMINER INITIAL	DOCUMENT NUMBER	DATE	NAME	CLASS	SUBCLASS	FILING DATE IF APPROPRIATE
	5,770,151	Jun 23, 1998	Roach et al.			
	5,957,167	Sep 28, 1999	Feygin			
	5,306,510	Apr 26, 1994	Meltzer			
	6,101,946	Aug 15, 2000	Martinsky			

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## Foreign Patent Documents

EXAMINER INITIAL	DOCUMENT NUMBER	DATE	COUNTRY	CLASS	SUBCLASS	TRANSLATION	
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	WO 99/22867	May 14, 1999	WO				
	EP 0 287 783	Oct 26, 1988	Europe				

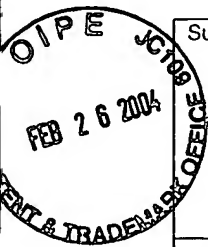
## Other Documents (Including Author, Title, Date Pertinent Pages, Etc.)

WWW	Anonymous, "Wire Printer Diagnostic Method," IBM Technical Disclosure Bulletin, Vol. 27, No. 9, 1985, p 5042
XXX	"Patent Abstracts of Japan," Vol. 007, No. 196, Aug. 26, 1983
YYY	Derisi et al, "The Mguide, a Complete Guide to Building Your Own Microarrayer," Biochemistry Department of Stanford University, 1999, pp 19-20
ZZZ	Rose, "Application of a Novel Microarraying System in Genomics Research and Drug Discovery," Journal of the Association for Laboratory Automation, Vol. 3, No. 3, July 1998, pp 53-56

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				Filing Date March 20, 2000	Group Art Unit 1743
Sheet	1	OF	1		

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EXAMINER INITIAL	DOCUMENT NUMBER	DATE	NAME	CLASS	SUBCLASS	FILING DATE IF APPROPRIATE

Foreign Patent Documents							
EXAMINER INITIAL	DOCUMENT NUMBER	DATE	COUNTRY	CLASS	SUBCLASS	TRANSLATION	
						YES	NO
	WO 99/36760	22 Jul 1999	World				
	WO 01/58593	16 Aug 2001	World				

Other Documents (Including Author, Title, Date Pertinent Pages, Etc.)		
	AAAA	Patent Abstracts of Japan: Kogyo, "Transcribing Member for Liquid and its Device," Publication No. 2000287670 (17-10-00)

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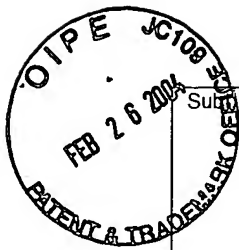
U.S. Patent Documents						
EXAMINER INITIAL	DOCUMENT NUMBER	DATE	NAME	CLASS	SUBCLASS	FILING DATE IF APPROPRIATE
	5,411,065	May 2, 1995	Meador et al.	141	1	Jan 10, 1994
	6,039,211	Mar 21, 2000	Slater et al.	222	1	Sep 22, 1998

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Foreign Patent Documents							
EXAMINER INITIAL	DOCUMENT NUMBER	DATE	COUNTRY	CLASS	SUBCLASS	TRANSLATION	
						YES	NO
	WO 00/51058	Aug 31, 2000	World				
	WO 00/63705	Oct 26, 2000	World				

Other Documents (Including Author, Title, Date Pertinent Pages, Etc.)		

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Sub For, PTO-1449

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Sheet 1 OF 1

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	6,015,880	01/18/00	Baldeschieler et al.	530	333	03/16/94
	6,083,763	07/04/00	Balch	436	518	12/31/97

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## Foreign Patent Documents

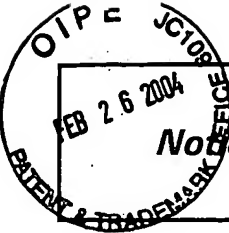
EXAMINER INITIAL	DOCUMENT NUMBER	DATE	COUNTRY	CLASS	SUBCLASS	TRANSLATION	
						YES	NO

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**Notice of References Cited**

Applicant/Patent <b>Schermer et al.</b>		Application/Control No. <b>09/527,893</b>	
Examiner <b>Dwayne K. Handy</b>		Art Unit <b>1743</b>	Page 1 of 1

**U.S. PATENT DOCUMENTS**

	Document Number Country Code-Number-Kind Code	Date MM-YYYY <sup>1</sup>	Name	Classification <sup>2</sup>	
A	5,133,664	7/1992	Hawk et al.	434	115
B					
C					
D					
E					
F					
G					
H					
I					
J					
K					
L					
M					

**COPY**

**FOREIGN PATENT DOCUMENTS**

	Document Number Country Code-Number-Kind Code	Date MM-YYYY <sup>1</sup>	Country	Name	Classification <sup>2</sup>	
N						
O						
P						
Q						
R						
S						
T						

**NON-PATENT DOCUMENTS**

	Include, as applicable: Author, Title, Date, Publisher, Edition or Volume, Pertinent Pages
U	
V	
W	
X	

\* A copy of this reference is not being furnished with this Office action. See MPEP § 707.05(a).    <sup>1</sup> Dates in MM-YYYY format are publication dates.    <sup>2</sup> Classifications may be U.S. or foreign.